

FIG. 5A 2A

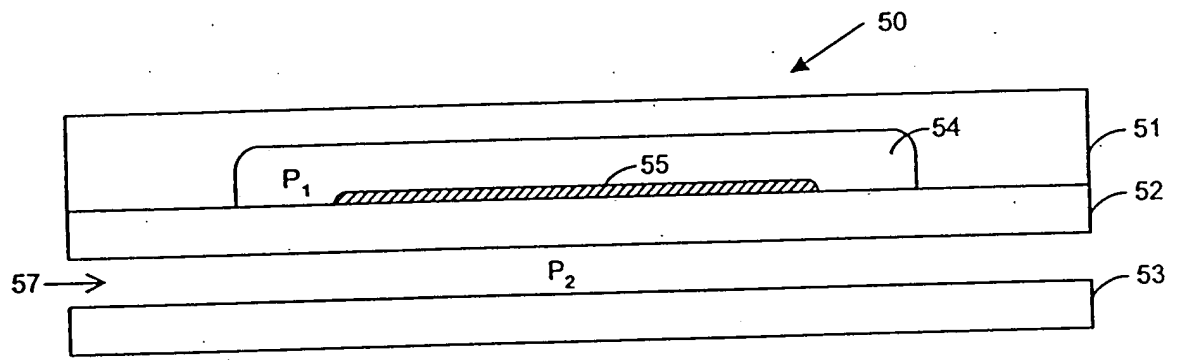


FIG. 5B 2B

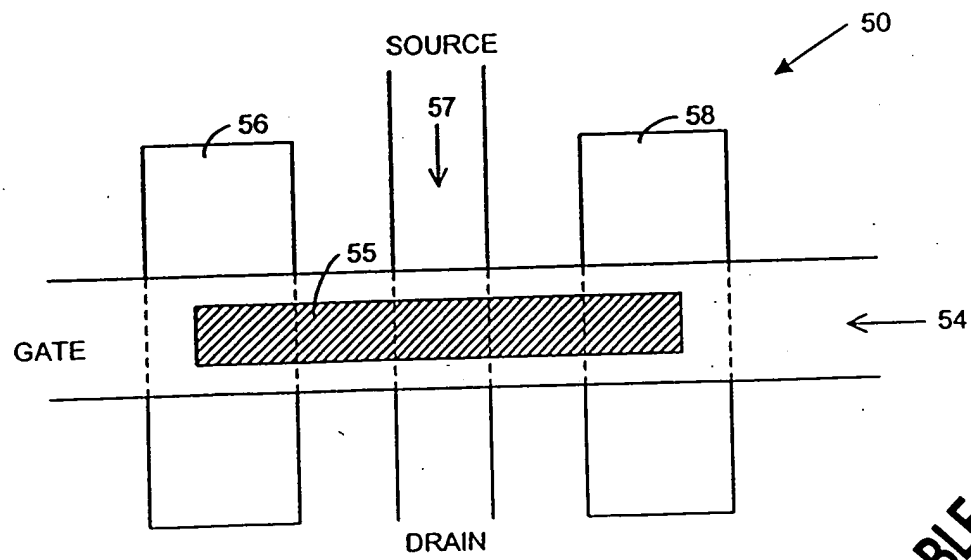
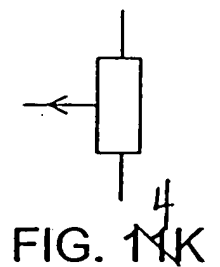
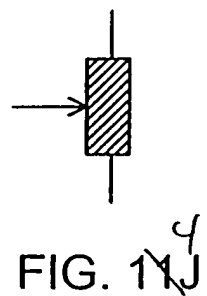
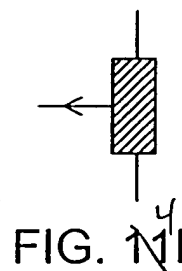
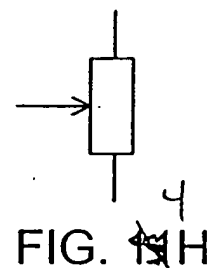
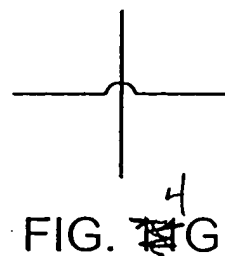
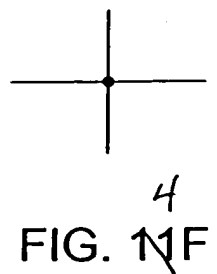
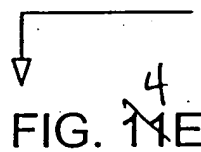
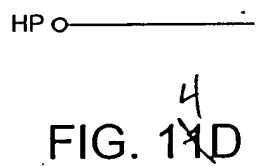
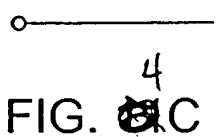
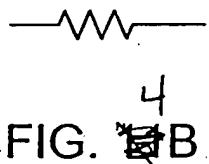
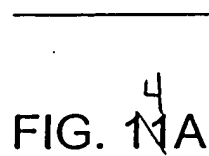


FIG. 3

BEST AVAILABLE COPY

FOI 250 25010300



BEST AVAILABLE COPY

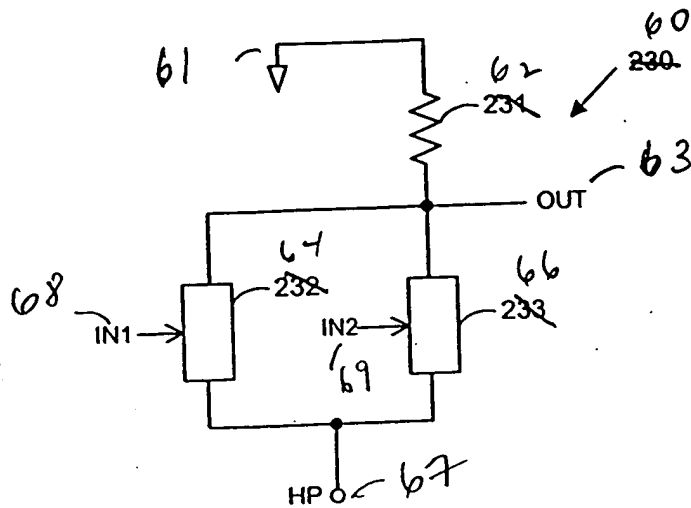


FIG. 5A

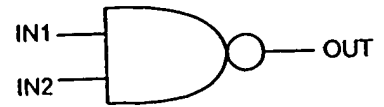


FIG. 5B

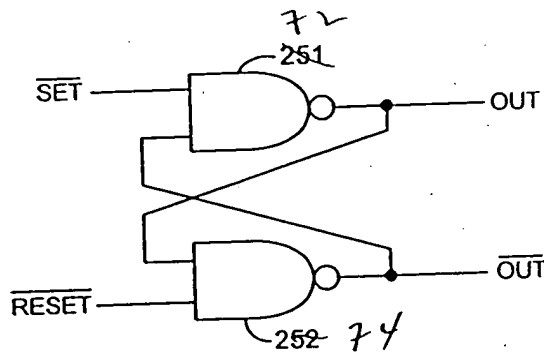


FIG. 6A

BEST AVAILABLE COPY

0000457 062701

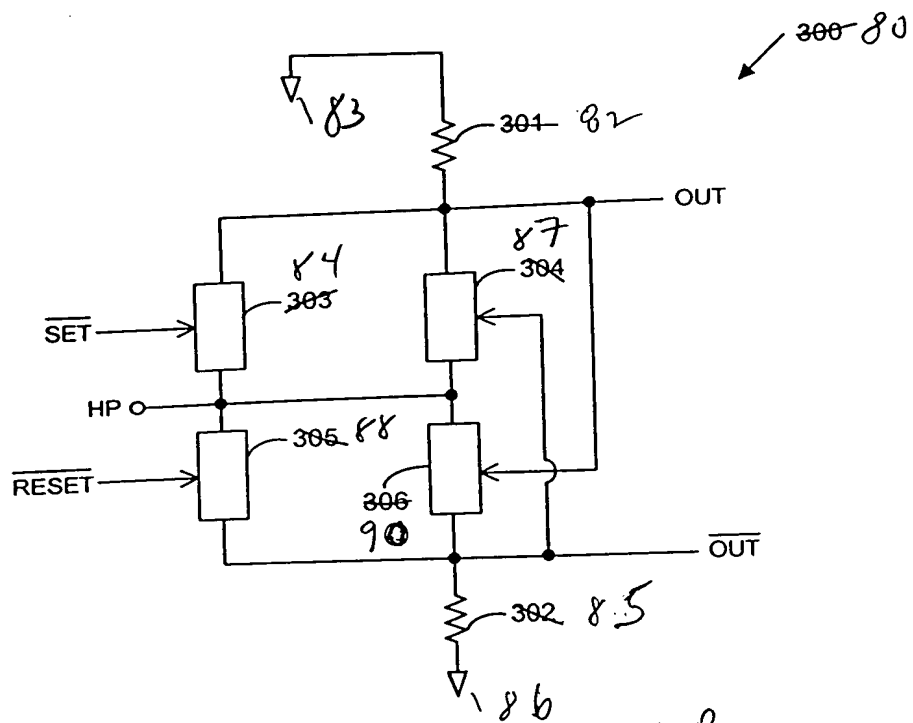


FIG. 1A Fig 6B

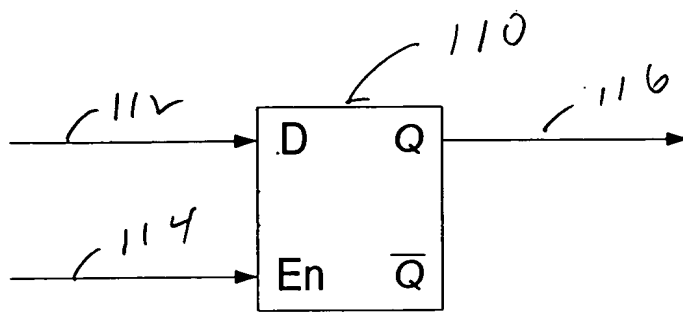


Fig 7A

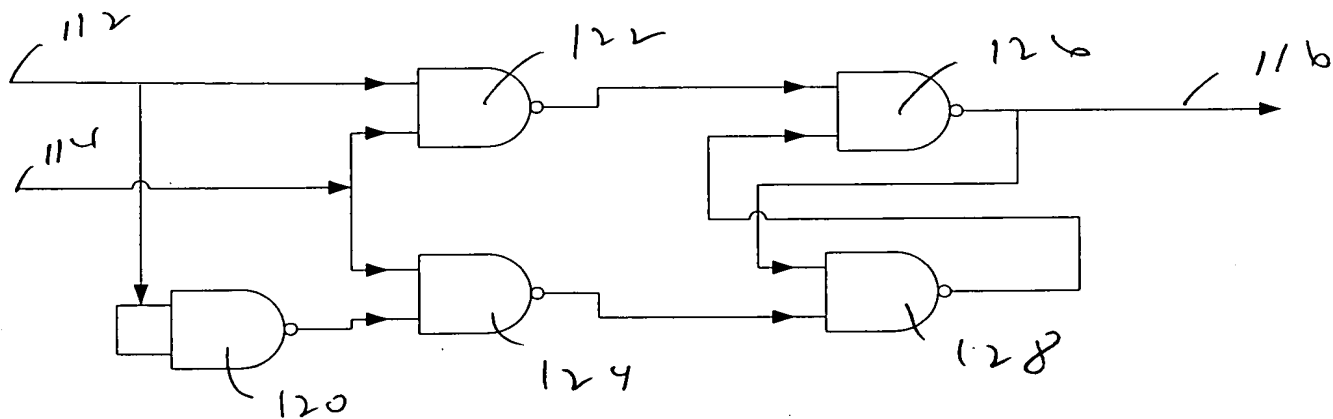


Fig 7B

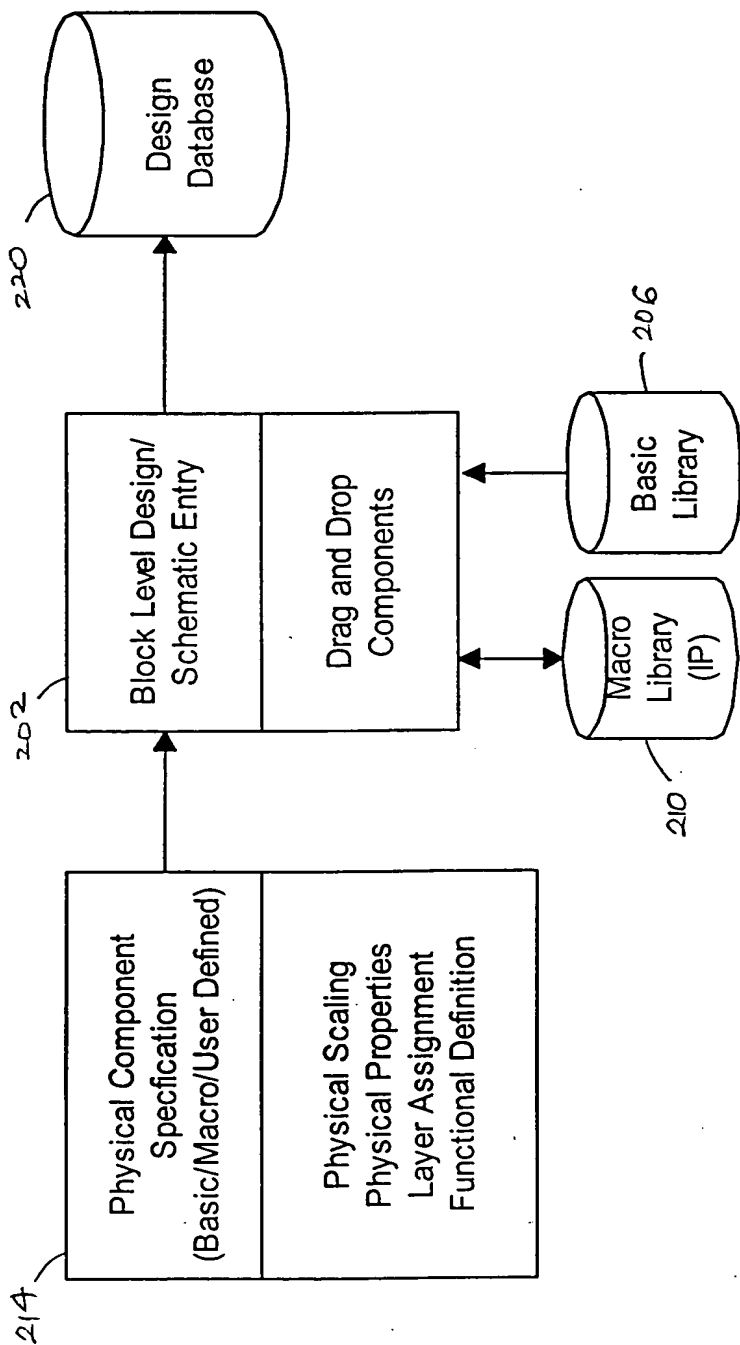
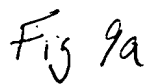


FIG. 8

On-Off Valve



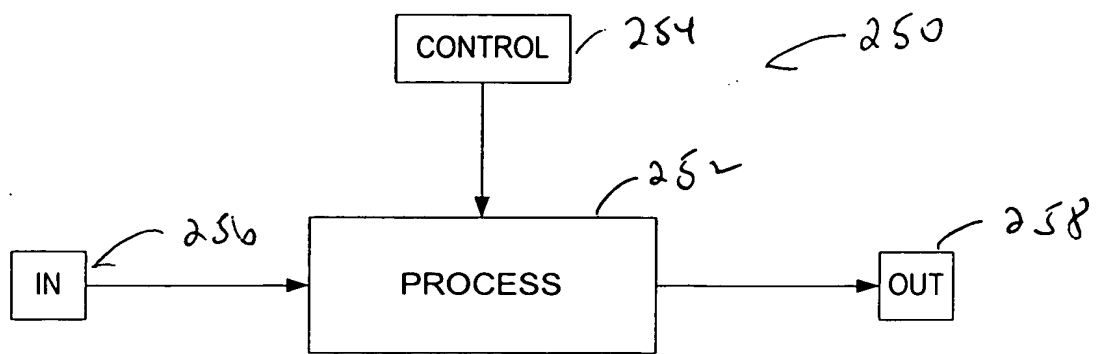


Fig 10

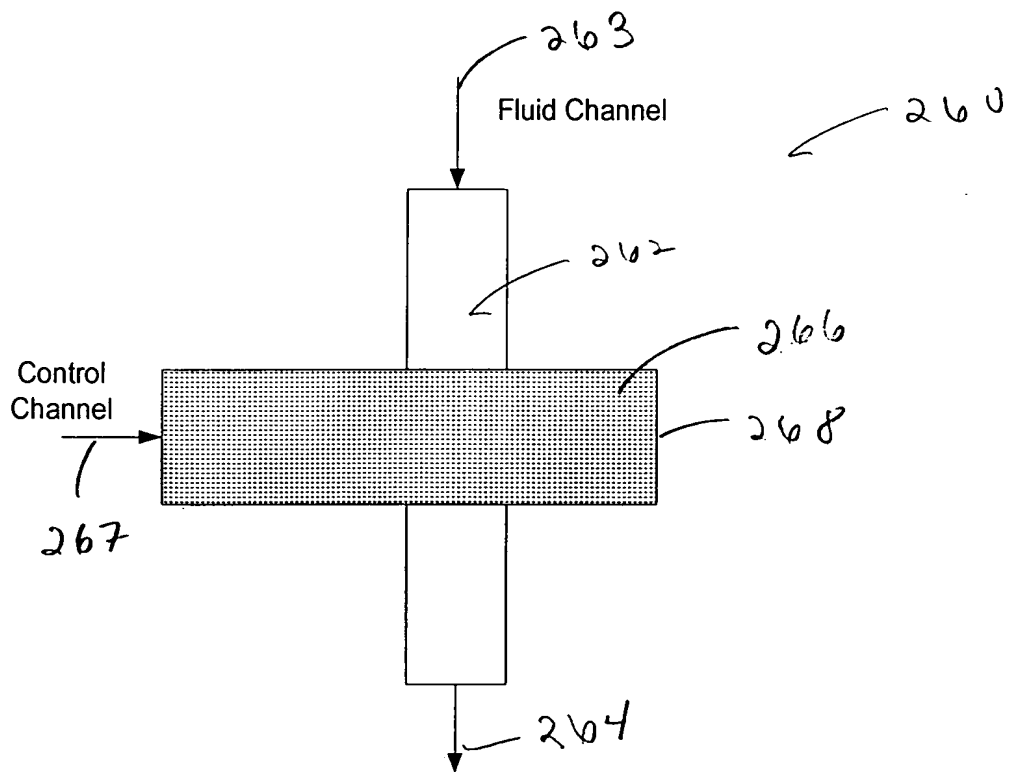


Fig 11

Fig 10 Fig 11

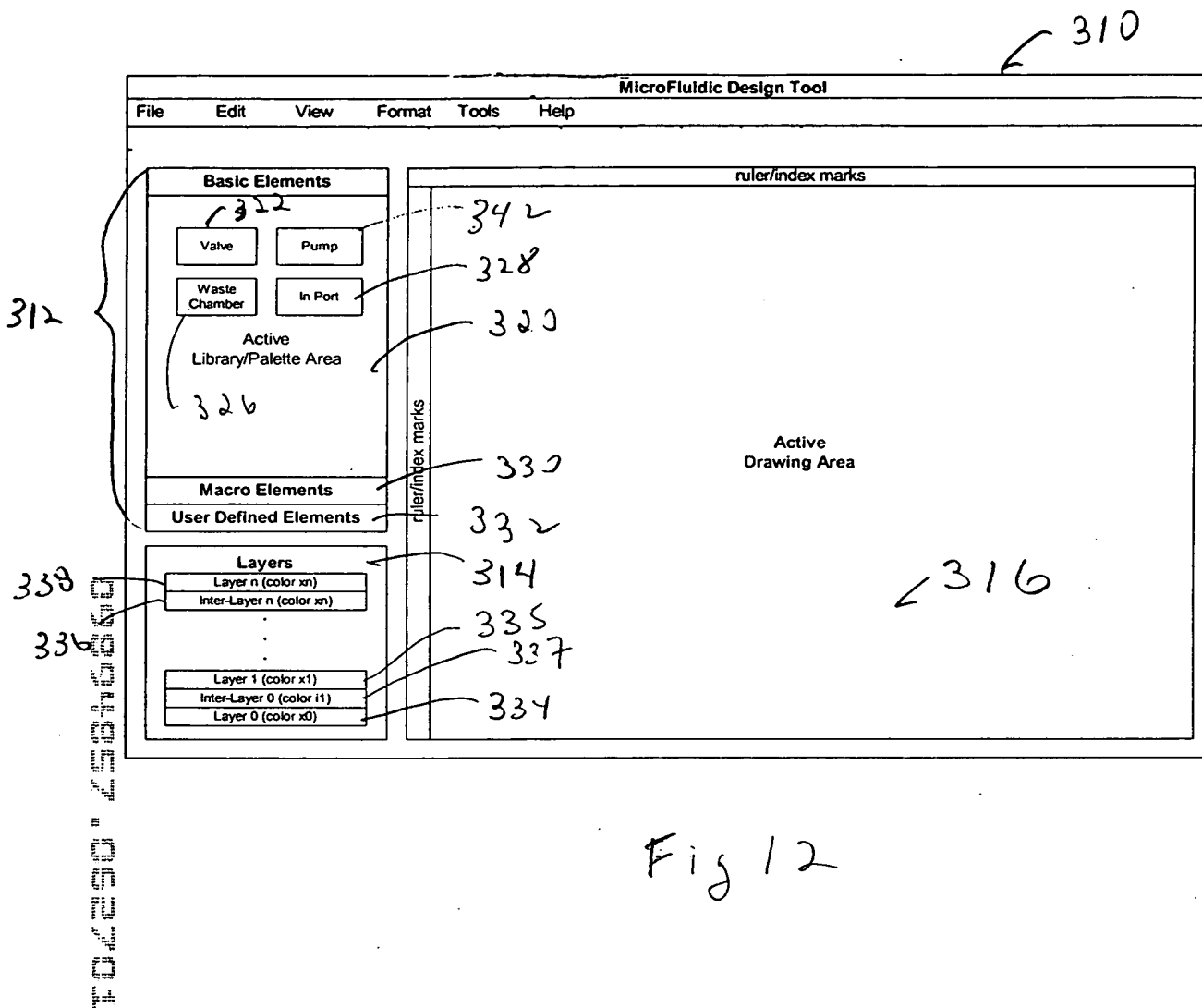


Fig 12

104250 45816860

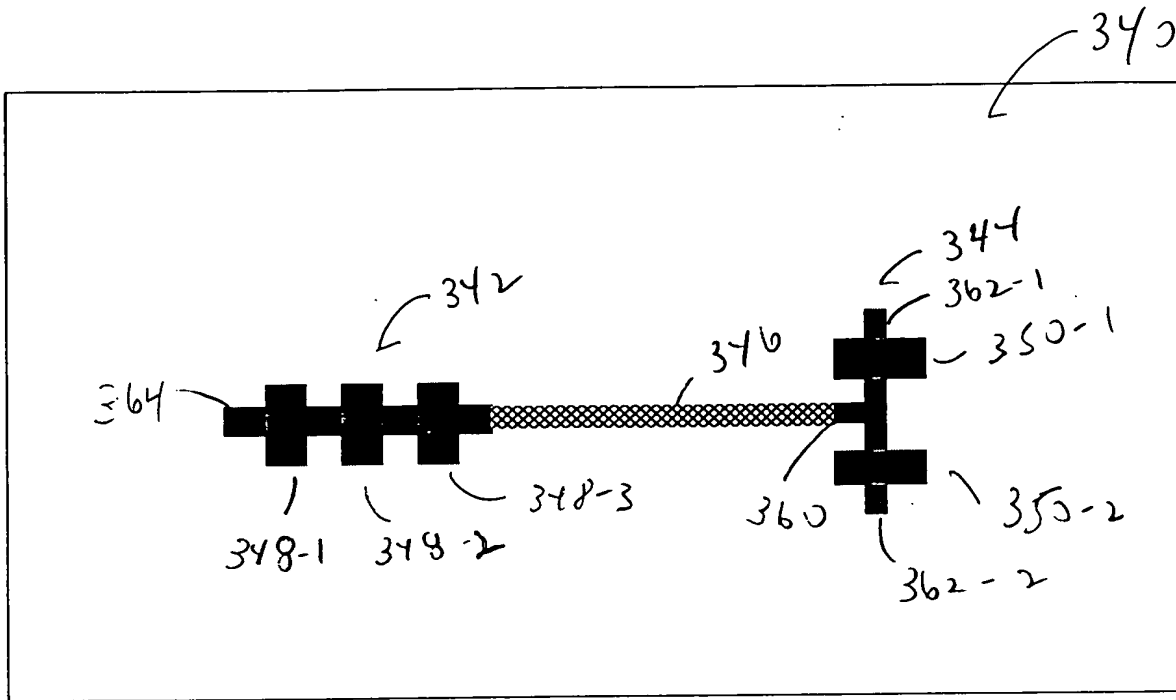


Fig 13A

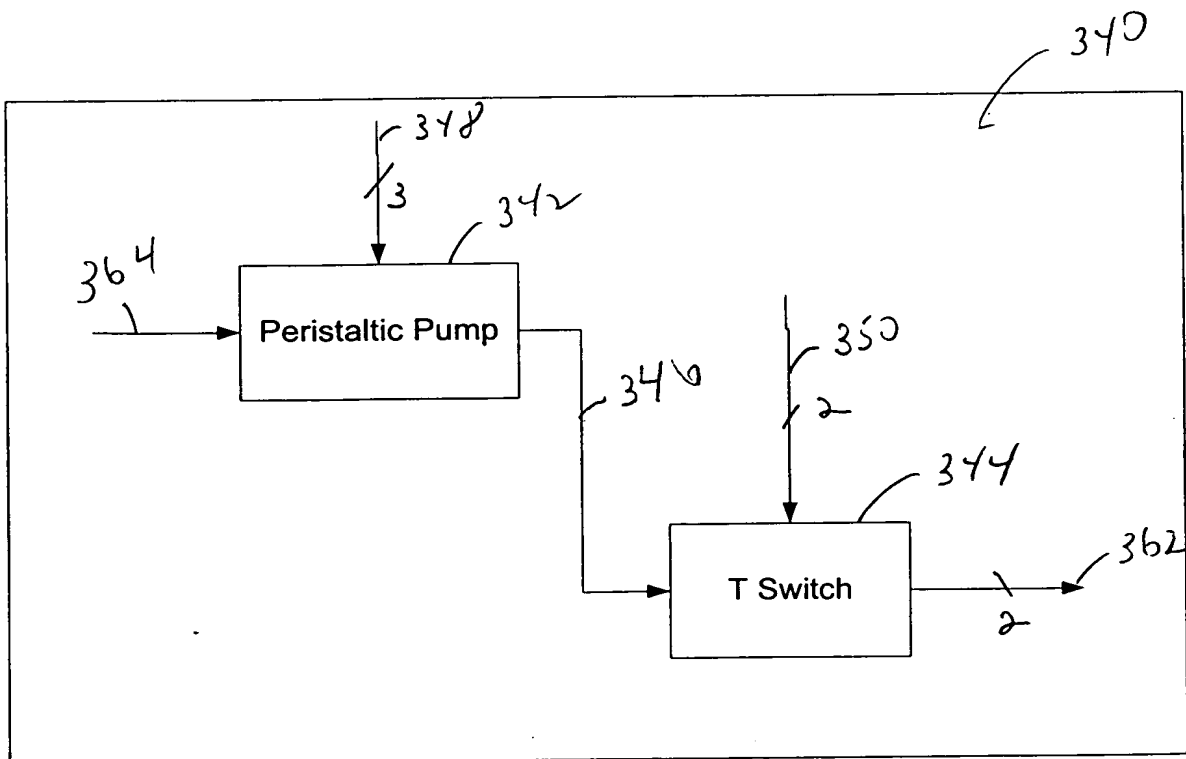


Fig 13B

360
300

Functional Static Analysis Results

380

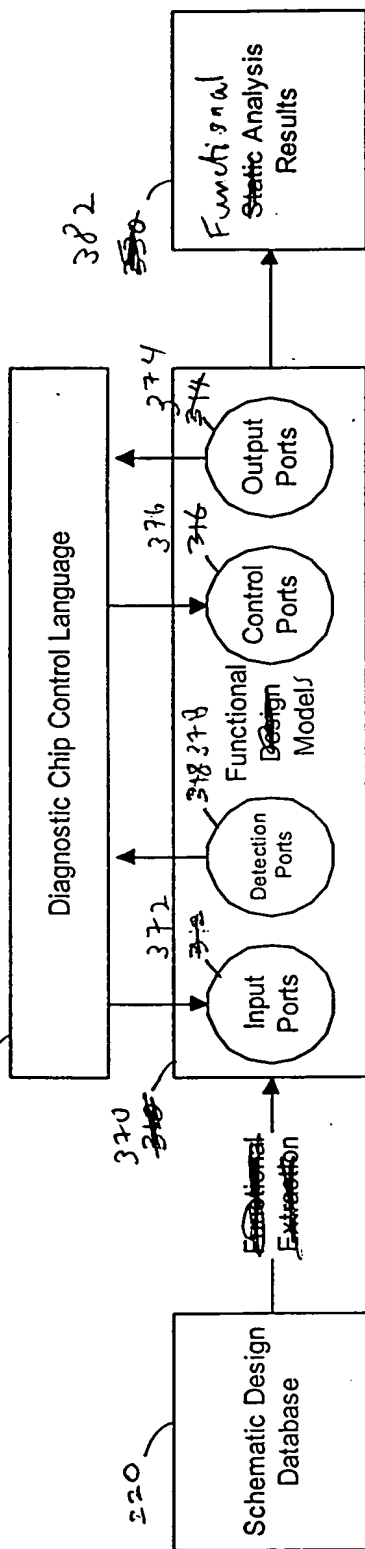


FIG. 14

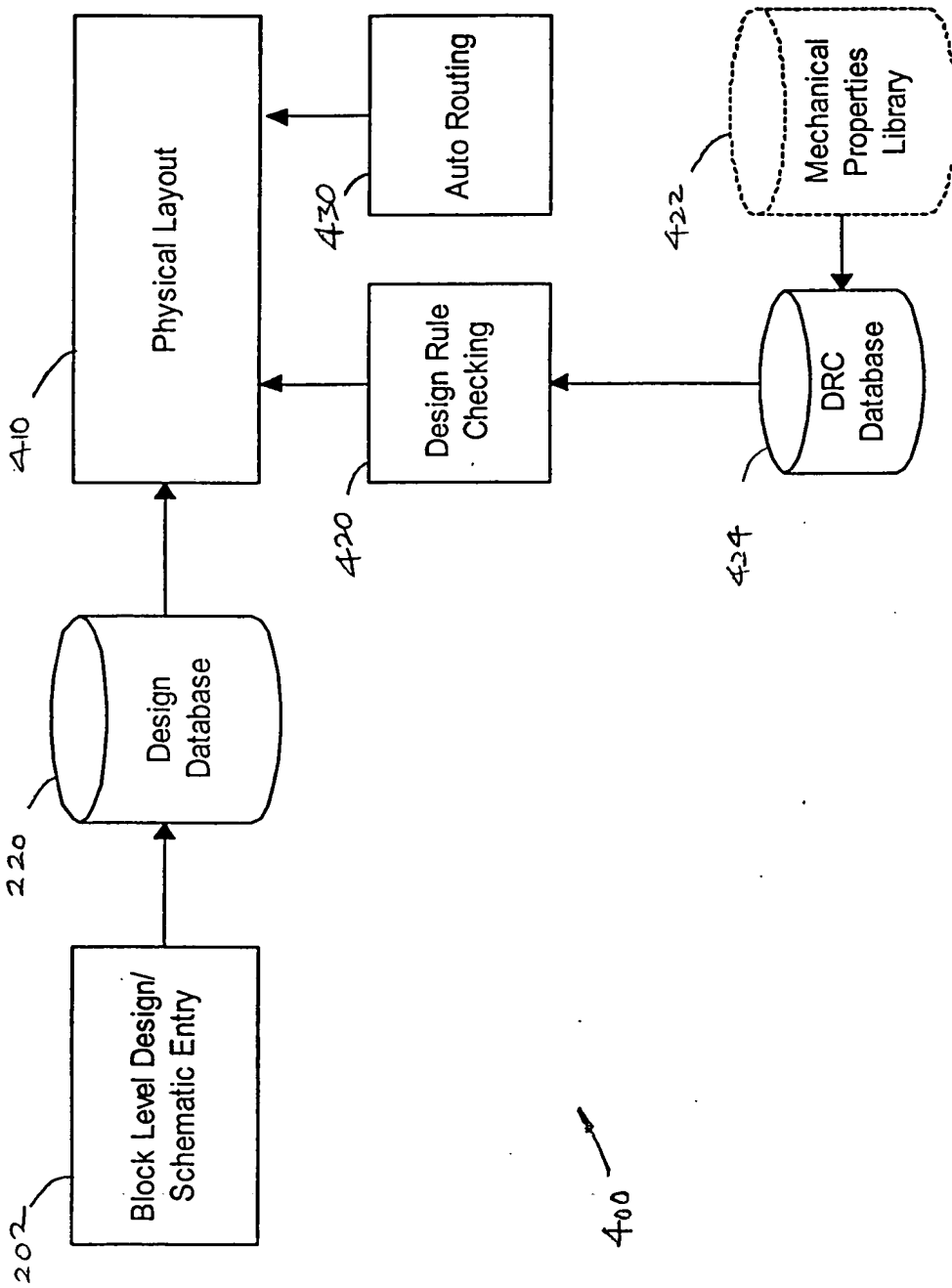


FIG. 4

00004057 052704

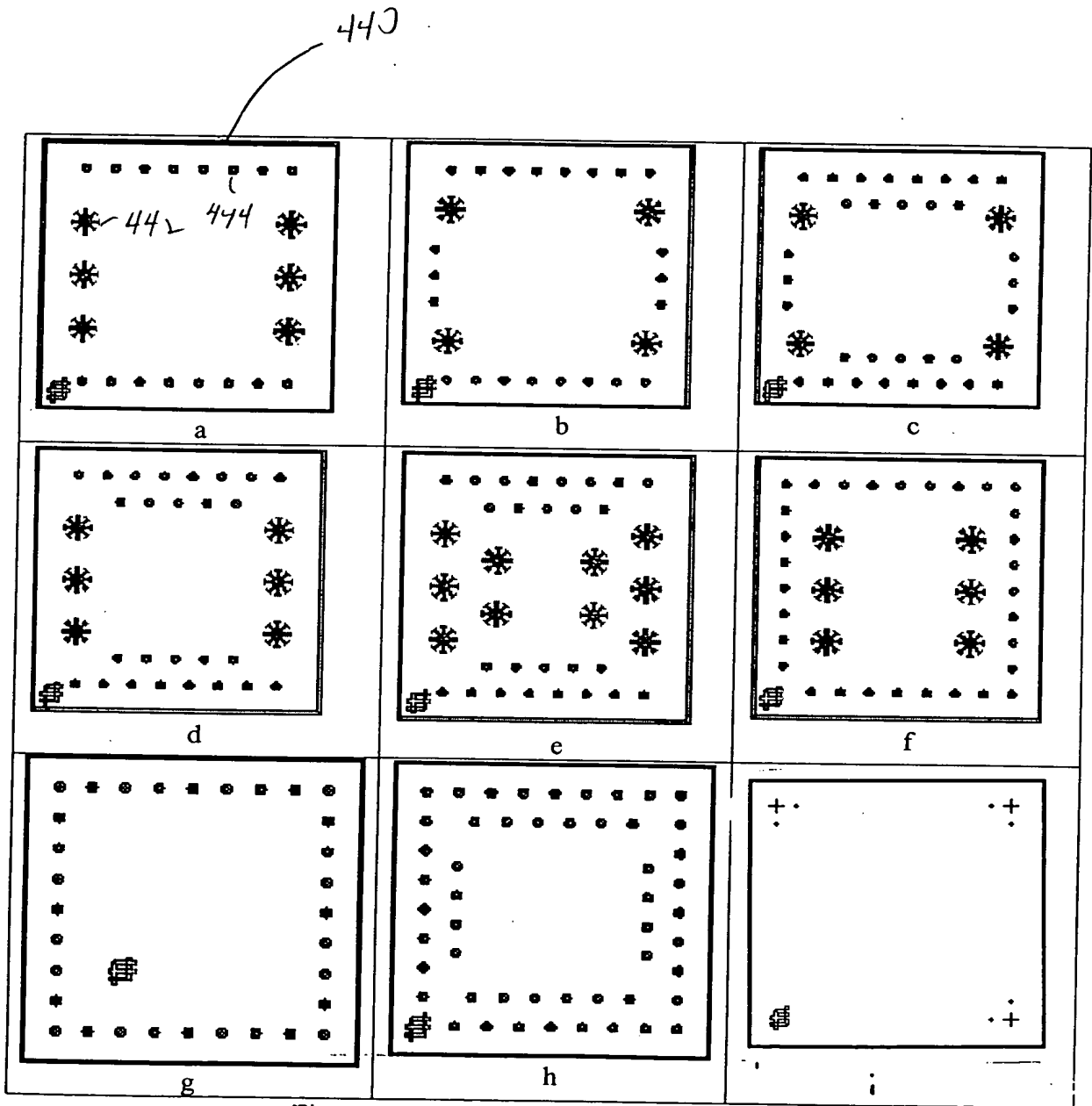
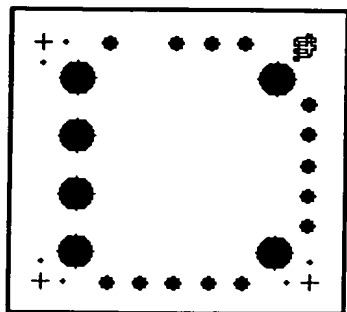
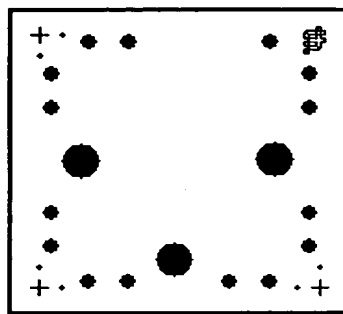


Fig 16A

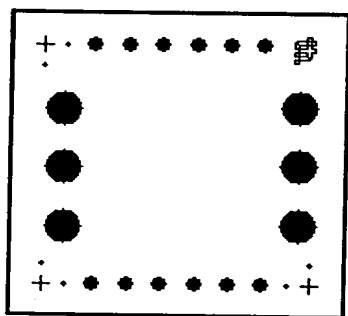
09894857.052704
10223075846360



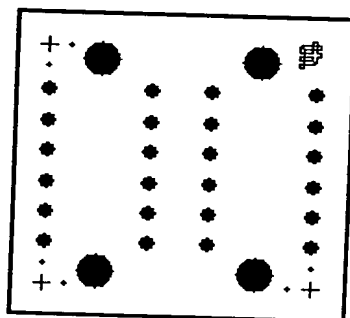
a



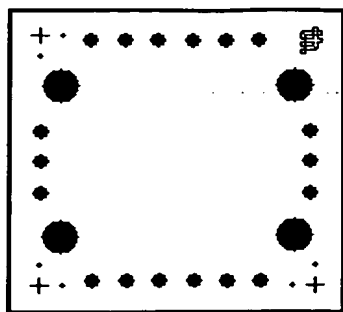
b



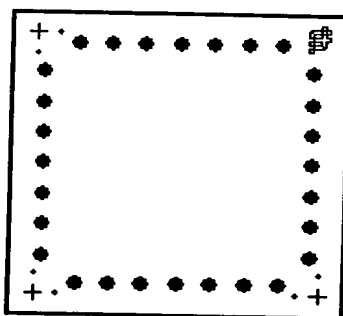
c



d

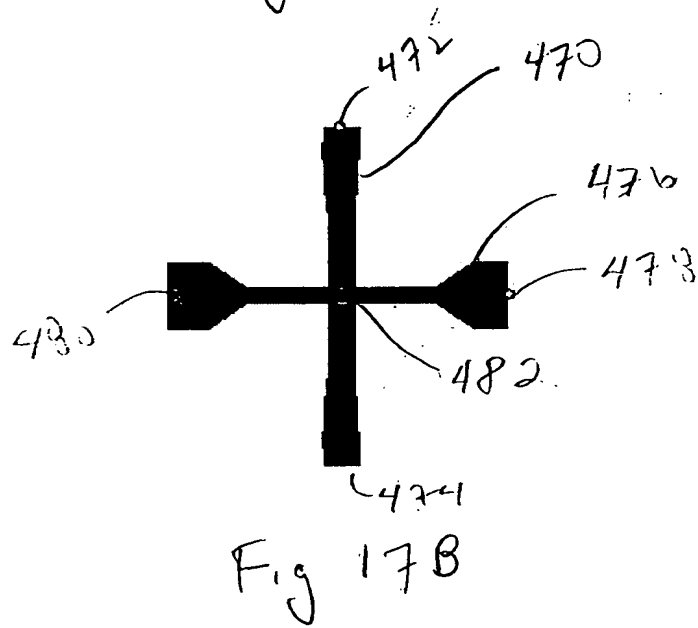
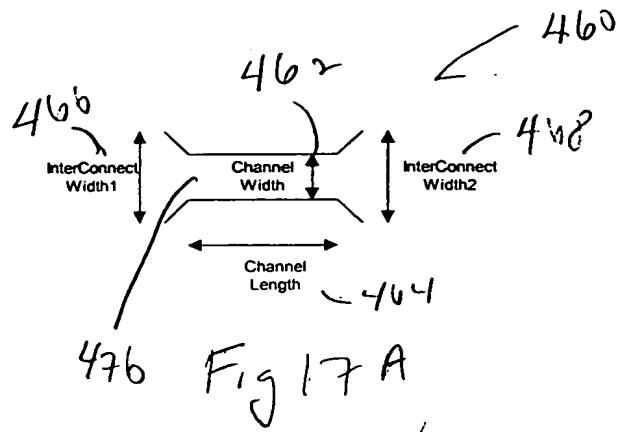


e



f

FIG. 16B



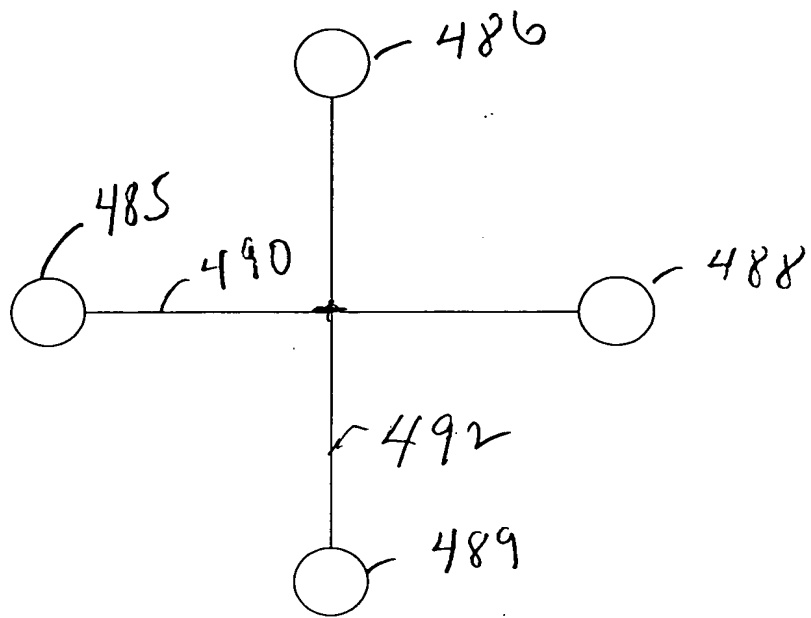


Fig 18 A

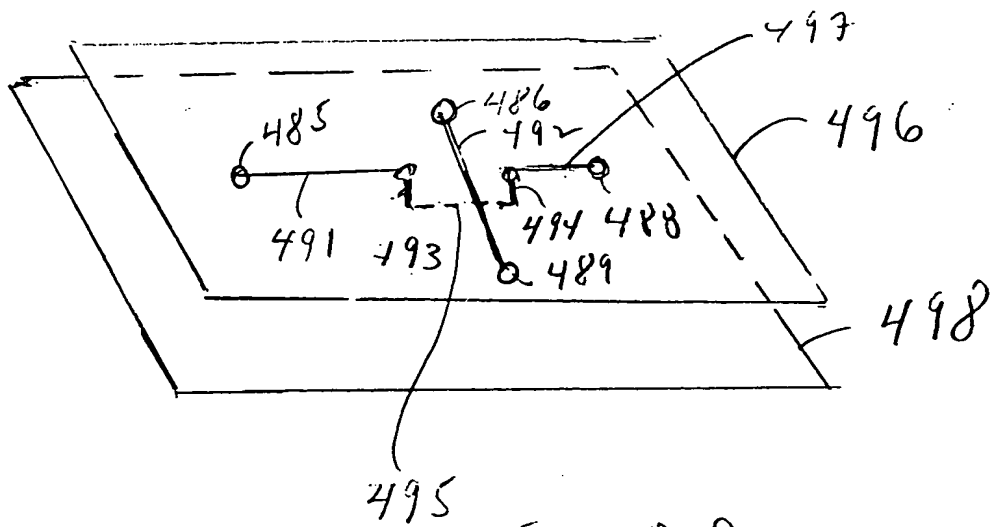


Fig 18 B

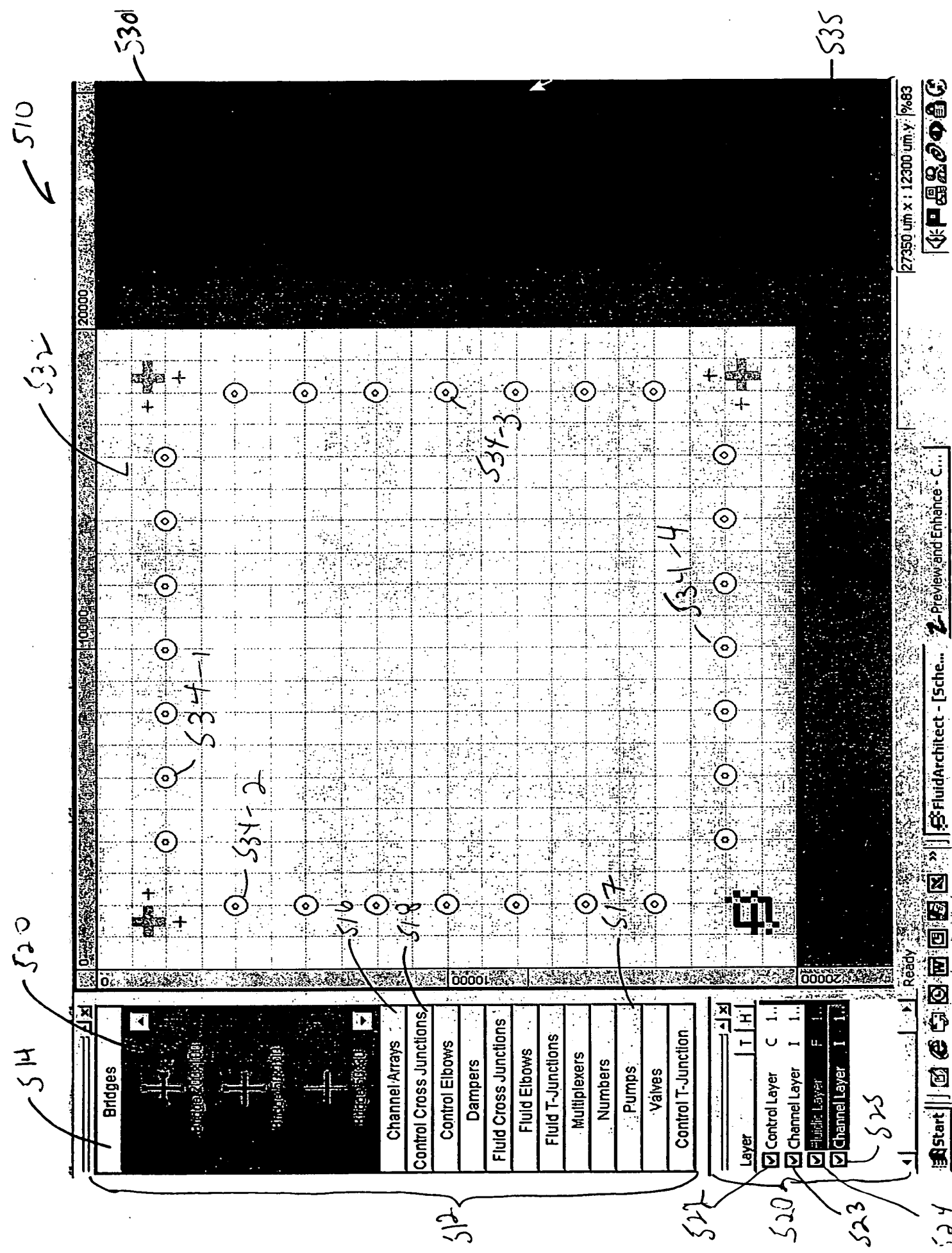


Fig. 19

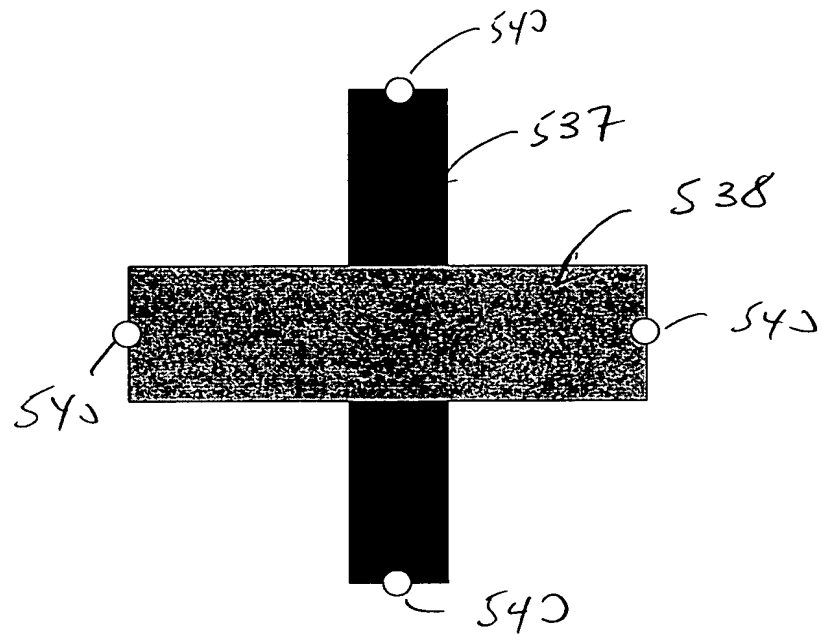


Fig 20

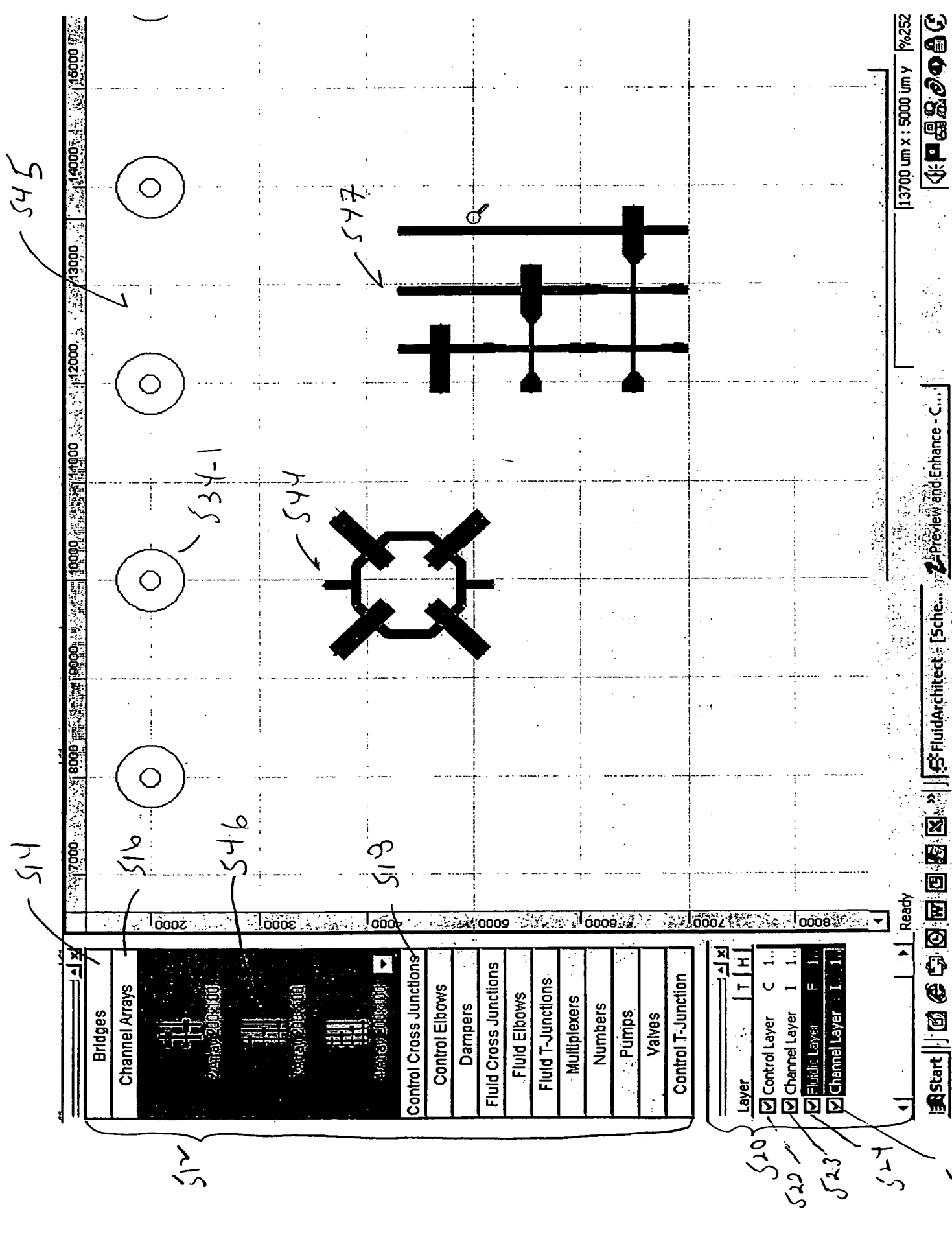
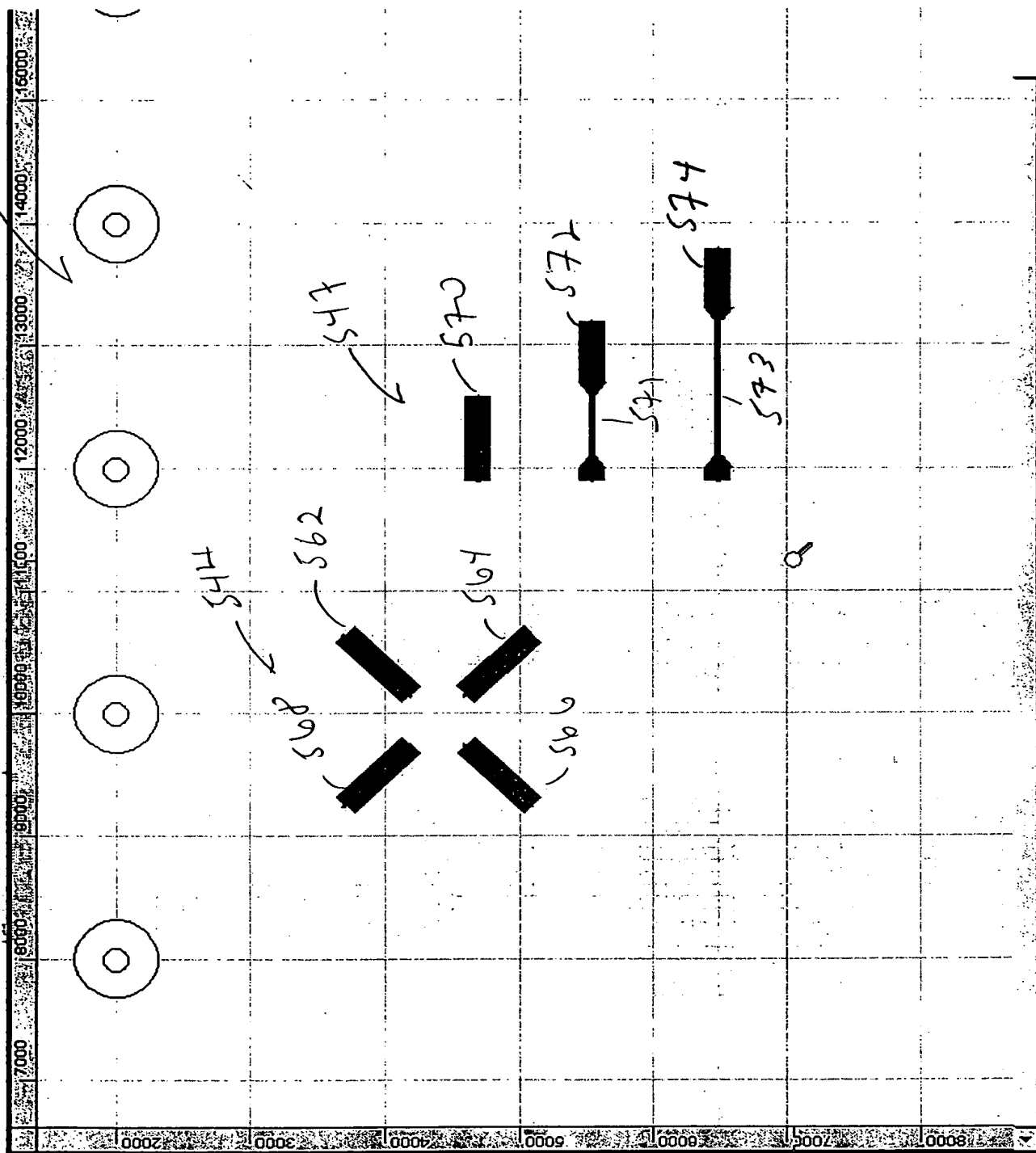


Fig 21

S45



Ready

Start | [Icons] | FluidArchitect - [Sche...]

11250 um x 7050 um y 8252

Preview and Enhance - C...

Fig 22

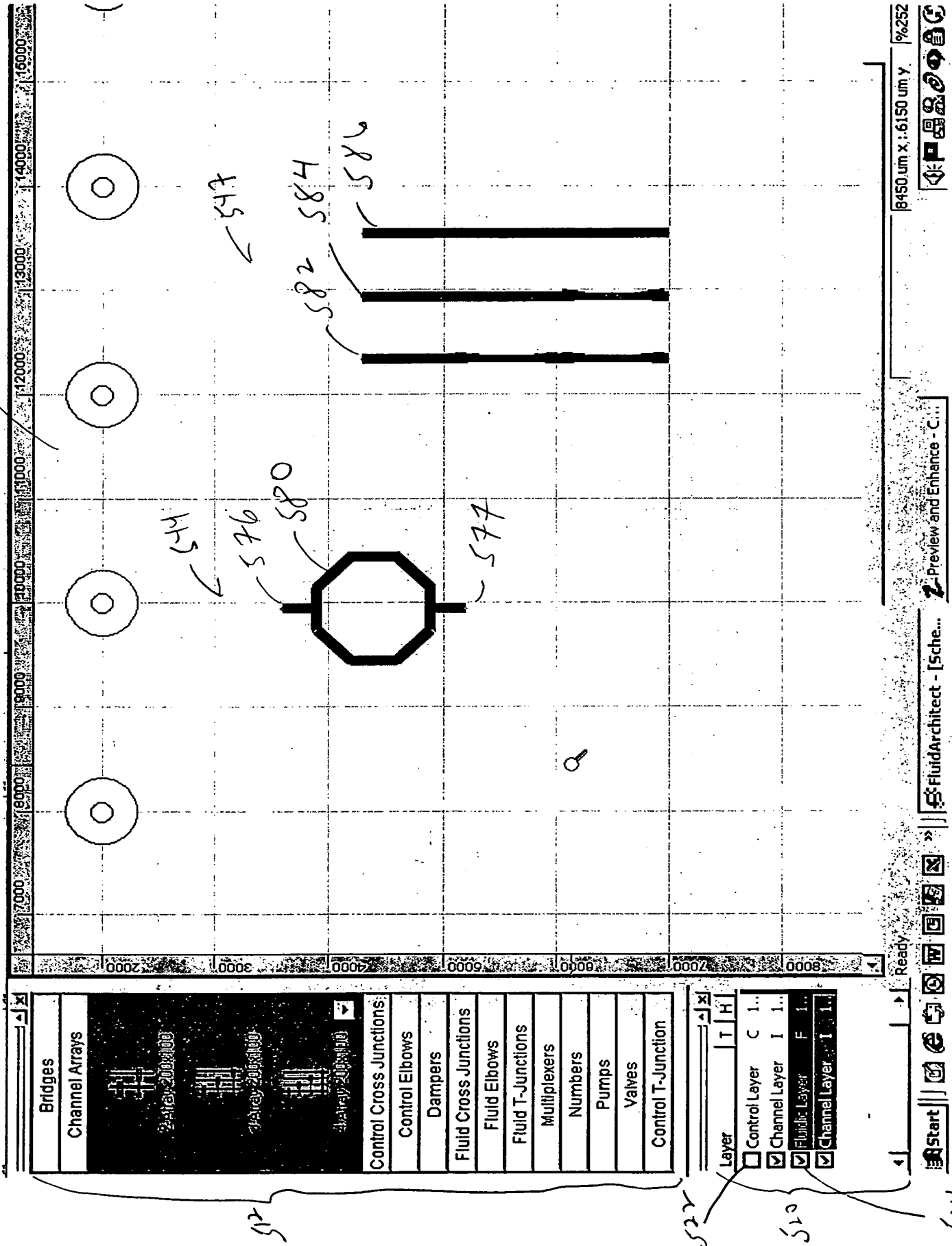
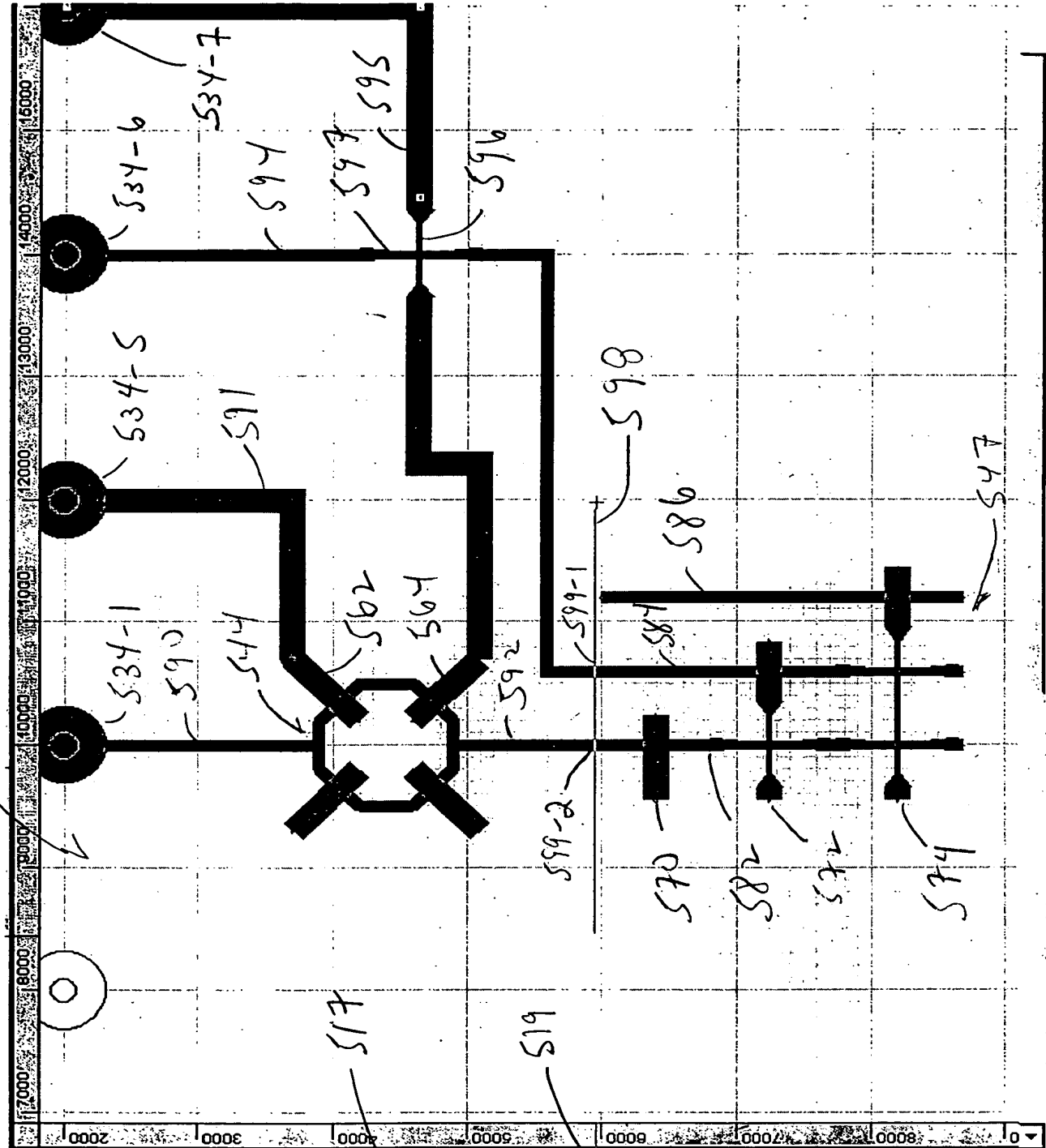


Fig 2.3

S45



11950 um X : 5950 um Y %252

3500 um



FluidArchitect - [Sche...]



Fig 24

Bridges
Channel Arrays
Control Cross Junctions
Control Elbows
Dampers
Fluid Cross Junctions
Fluid Elbows
Fluid T-Junctions
Multiplexers
Numbers
Pumps
Valves
Control T-Junction

Layer	T	H
Control Layer	C	1..
Channel Layer	I	1..
Fluidic Layer	F	1..
Channel Layer	I	1..

Ready

S12

S20

S22

S21

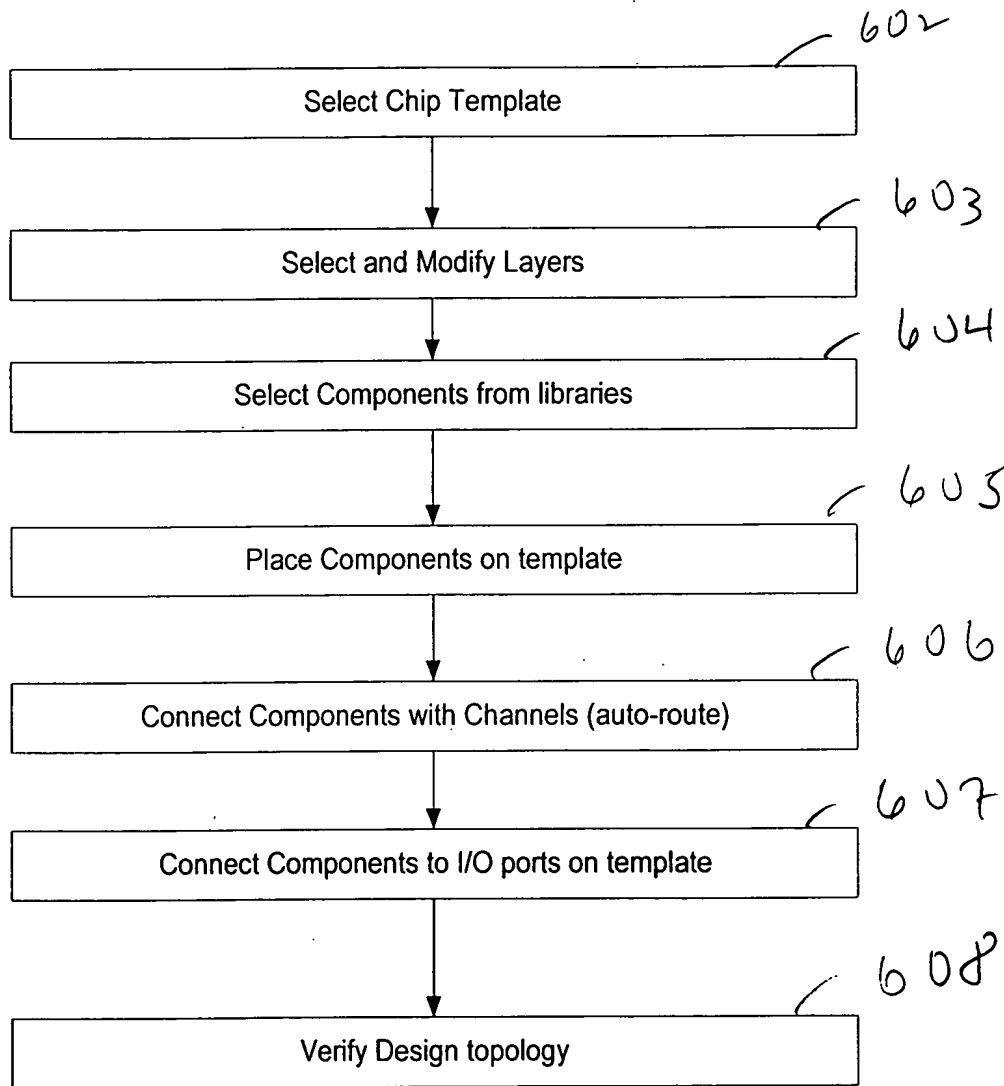
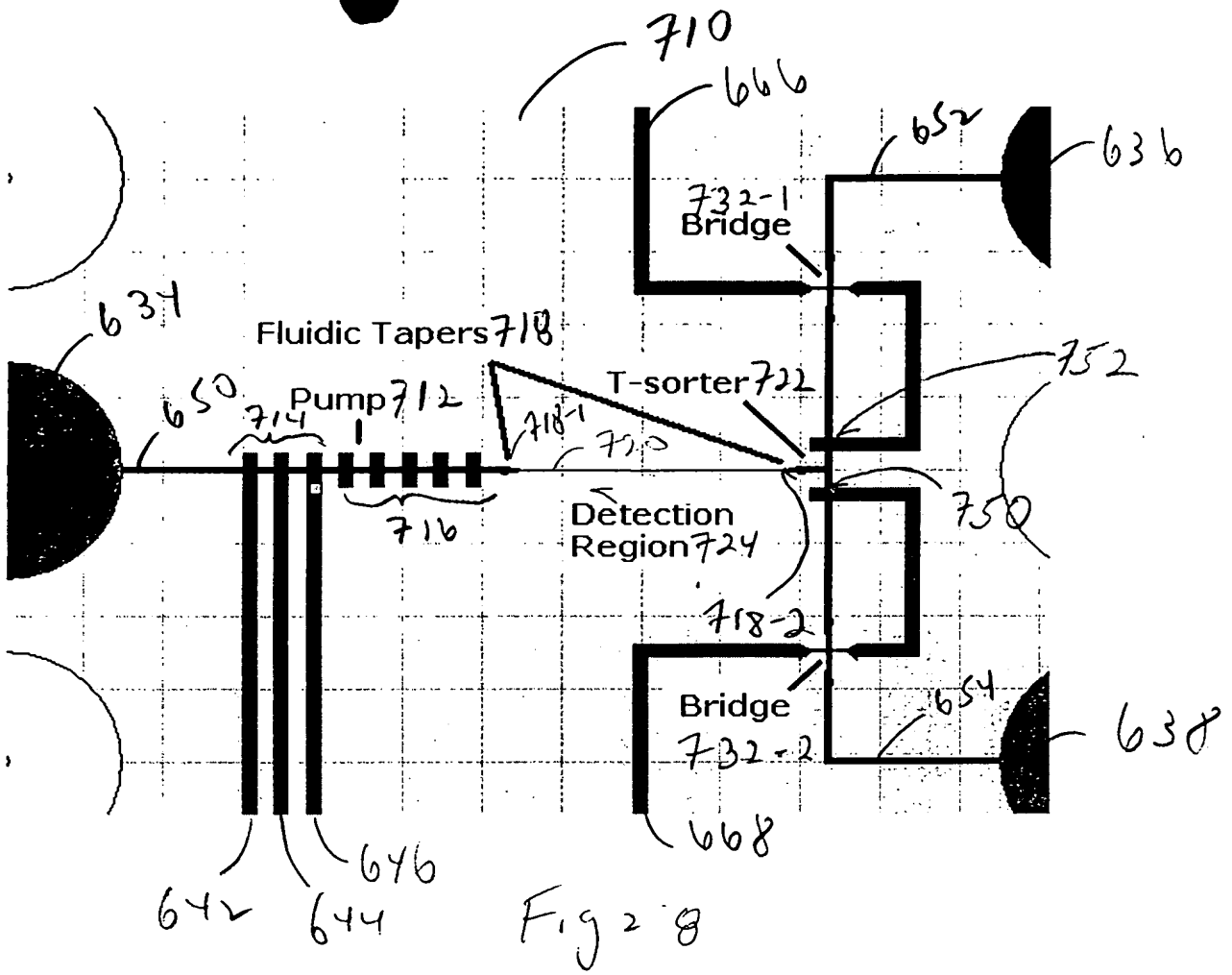


Fig 25

Fig 27

00004057.052704



Die Layout Settings

Wafer Size	Die	Top	Left	X Pitch	Y Pitch
3"	4	10.4mm	10.4mm	15mm	15mm
4"	12	9.2mm	9.2mm	0.8mm	0.8mm

Buttons: Save, Cancel, Reset Values, Help

Diagram labels: Top, Left, X pitch, Y pitch

Handwritten annotations: 974, 976, 978, 960, 980, 982, 968, 972-1, 972-2, 970, 972-3, 972-4, 966

Fig 29.